What are neural tube defects?

Neural tube defects (NTDs) are developmental abnormalities that occur when the brain and spine are forming during the first 30 days after you become pregnant. This is often before you realize you are pregnant.

The most common types of NTDs are:

- **Anencephaly**: the skull and brain do not form properly. Babies cannot survive with this birth defect.

- **Spina Bifida**: the spinal cord, bony spinal column and soft tissue layer over the spine do not form properly.

- **Encephalocele**: the skull does not form properly, allowing part of the brain to be contained within a sac outside the skull.

Although we do not know the cause of most NTDs, we do know that the risk is increased among families who have had an affected pregnancy. Importantly, we know the use of folic acid prior to pregnancy and during early pregnancy can reduce the risk for these families.
To reduce the risk for a neural tube defect, it is important for you to:

1. **Plan your next pregnancy.** Make an appointment with your health care provider to discuss your next pregnancy.

2. Until one month before trying to become pregnant or even if you are not planning to become pregnant, be sure to **take a vitamin with 0.4 mg (400 mcgs) of folic acid daily.** Most multivitamins have the correct amount. You may see folic acid referred to as folate on labels. Sometimes the amount appears on the bottle as 0.4 milligram, 400 micrograms, or 100% daily value. Do not take more than one multivitamin per day.

3. **Take 4.0 mgs (4,000 mcgs) of folic acid daily at least one month before becoming pregnant (before conception).** This is 10 times the usual amount of folic acid. You must get a prescription from your health care provider for this amount.

4. **Eat a healthy diet.** Good sources of folic acid in foods include green leafy vegetables, cereal, pasta, bread, beans, lentils, and orange juice. Check the cereal you eat. It may contain 0.4 mg (400 mcgs) of folic acid in one bowl.

5. **Understand** that it is difficult to get enough folic acid from food sources alone. A daily vitamin with folic acid and a healthy diet are important.

National Center on Birth Defects and Developmental Disabilities

For more information or questions, contact:

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